

Table C-109. Federal obligations for applied research, by detailed field of science and engineering: fiscal years 1981-91

[Dollars in millions]

Field of science and engineering	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total, all fields	7,171.5	7,540.6	7,993.4	7,911.4	8,314.7	8,349.1	8,998.1	9,176.5	10,163.5	10,336.8	11,797.6
Life sciences, total	2,211.8	2,219.5	2,286.6	2,348.3	2,575.9	2,605.5	2,979.5	3,222.7	3,579.4	3,652.3	4,188.4
Biol & agricultural, total	1,249.4	1,137.0	1,135.6	1,150.3	1,239.8	1,318.4	1,488.1	1,718.0	1,917.2	1,959.4	2,223.0
Biol (excl environmental)	794.9	678.1	683.7	727.3	779.3	841.9	1,040.5	1,266.8	1,336.0	1,402.5	1,589.3
Environmental biology	137.0	100.4	101.0	129.2	134.6	138.3	148.6	154.2	210.5	174.0	272.8
Agricultural	317.4	358.6	351.0	293.8	325.8	338.1	299.1	297.0	370.7	382.9	360.9
Medical sciences, total	903.7	979.6	1,048.5	1,097.5	1,223.1	1,163.8	1,323.8	1,367.8	1,514.1	1,532.7	1,602.6
Life sciences, n.e.c.	58.7	102.9	102.4	100.4	113.0	123.3	167.6	136.9	148.1	160.2	362.9
Psychology, total	117.9	128.5	147.9	158.8	194.3	201.0	222.4	212.0	234.5	233.5	256.9
Biological aspects	27.0	26.7	31.8	37.1	43.2	43.1	49.1	52.9	60.8	65.3	72.0
Social aspects	63.3	64.4	71.8	74.3	96.0	98.3	108.9	108.4	111.8	116.5	128.2
Psychological sci, n.e.c.	27.7	37.4	44.3	47.4	55.1	59.7	64.4	50.7	61.9	51.7	56.7
Physical sciences, total	895.6	1,106.5	1,304.3	1,241.0	1,230.8	1,154.6	1,156.6	1,117.7	1,198.8	1,147.2	1,353.9
Astronomy	6.8	4.7	3.0	2.7	14.1	15.1	17.7	12.3	17.3	17.2	19.3
Chemistry	188.7	169.2	158.1	203.0	225.4	229.0	235.2	232.3	278.0	259.6	289.7
Physics	610.2	819.8	999.5	915.0	856.1	802.6	781.4	769.8	795.5	780.6	816.0
Physical sciences, n.e.c.	89.9	112.9	143.7	120.3	135.2	107.9	122.4	103.3	108.0	89.8	228.9
Environmental sciences, total	588.2	628.3	671.2	619.2	704.0	732.6	730.6	734.3	756.3	899.3	886.3
Atmospheric sciences	199.6	262.6	288.1	242.0	276.8	280.9	309.1	307.1	271.6	329.7	353.7
Geological sciences	201.9	180.1	155.2	161.0	179.0	178.4	175.6	174.3	207.8	221.4	229.7
Oceanography	118.4	106.8	147.9	143.4	179.3	205.4	177.6	190.9	198.4	220.4	201.0
Environmental sci, n.e.c.	68.4	78.7	80.0	72.9	69.0	67.9	68.3	61.9	78.5	127.8	101.7
Math & computer sci, total	138.6	185.0	211.3	199.5	314.9	322.0	334.3	329.6	389.7	433.9	477.6
Mathematics	38.6	37.3	32.6	37.1	53.4	42.1	46.1	52.5	68.3	65.0	63.2
Computer sciences	69.3	103.5	124.1	109.7	164.2	171.0	169.3	167.2	205.1	336.9	361.4
Math & computer sci, n.e.c.	30.7	44.3	54.6	52.7	97.3	108.9	118.9	109.9	116.3	31.9	52.9
Engineering, total	2,545.4	2,776.1	2,827.5	2,779.1	2,733.4	2,770.4	2,916.8	2,950.2	3,258.4	3,125.1	3,710.8
Aeronautical	596.3	614.7	679.9	634.9	546.5	549.3	573.0	570.8	658.9	657.5	760.0
Astronautical	270.8	245.9	271.1	344.4	383.2	474.4	575.9	526.9	618.5	518.5	583.4
Chemical	116.3	59.9	94.6	88.9	179.9	172.8	138.3	169.5	92.2	166.0	202.6
Civil	135.8	169.9	156.0	161.0	173.0	157.8	158.7	168.7	178.1	270.4	245.7
Electrical	478.2	518.6	519.1	499.7	481.9	518.1	610.9	577.1	669.3	493.1	587.4
Mechanical	157.3	148.1	205.7	126.3	178.8	153.0	146.2	157.2	156.5	176.9	220.0
Metallurgy & materials	117.5	153.2	149.6	153.7	227.4	216.6	152.2	226.6	266.2	294.3	416.1
Engineering, n.e.c.	673.4	865.7	751.4	770.1	562.8	528.5	561.6	553.3	618.8	548.4	695.4
Social sciences, total	360.5	265.7	297.5	303.8	319.3	302.0	350.5	339.0	396.4	484.0	566.0
Anthropology	1.5	1.5	1.6	1.7	2.1	2.4	2.9	2.2	1.8	1.9	3.3
Economics	172.6	118.2	124.6	117.6	125.4	105.0	119.6	124.8	129.1	160.1	150.1
Political science	4.5	3.2	6.6	6.7	8.9	7.5	5.8	7.1	8.1	6.8	10.0
Sociology	42.4	33.3	35.0	36.3	34.0	37.0	39.6	45.0	55.9	92.0	155.7
Social sciences, n.e.c.	139.5	109.6	129.8	141.4	148.9	150.2	182.6	159.9	201.6	223.3	246.9
Other sciences, n.e.c.	313.5	231.0	247.1	261.7	242.2	260.9	307.4	271.0	350.0	361.5	357.8

KEY: n.e.c. = Not elsewhere classified

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2000, 2001, and 2002